EOS Data Gateway

The goals of the Earth Observing System (EOS) Information Management System (IMS) are to facilitate Earth science research through improved access to existing data and to serve as a prototyping testbed for the EOSDIS Core System (ECS), which will serve as EOSDIS V1. ECS is designed to accommodate the tremendous amount of data expected from a series of EOS instruments beginning with the launch of EOS AM-1.

The EOS IMS provides a consistent view of more than 700 data products held at several EOSDIS and international data centers. It allows users without specific knowledge of the data to search science data holdings, retrieve high-level descriptions of data sets and detailed descriptions of the data inventory, view browse images, and place orders for data products. The Web "Gateway" is a free service which is accessible over the Internet via the World Wide Web user interface.

Search & Order Data

A search is done by specifying geographic criteria, along with optional selections for temporal criteria, geophysical parameters, data sources, instruments, and data centers. Three different search types provide increasingly detailed information about science data available through the system.

- A *directory* search provides summary information about EOSDIS data sets to help the user determine which data products are appropriate. A directory search will access the Global Change Master Directory, a multidisciplinary database of information about Earth science data.
- A *guide* search provides detailed descriptions about data sets, data sources, instruments, projects, and data centers, and includes algorithm descriptions and calibration information.
- An *inventory* search gives descriptions of specific observations or collections of observations of data (granules) that are available for request from a data center.

Additional Functions

The *order* function allows the user to select the desired data processing options and media. This function also allows the user to specify contact, billing, and shipping addresses.

The *coverage map* is a graphical representation of the geographic coverage of selected data observations (data granules).

The *browse* function allows the user to view data samples (possibly reduced in resolution) as an aid to selection for many of the products at the data centers. Such data may be viewed in the EOS IMS interface or retrieved via File Transfer Protocol (ftp).

Accessing the EOS IMS

The EOS IMS offers a Web interface which provides access via the Internet to Earth science data and information from U.S. and international data centers. It is suitable for a wide range of Earth science data users—from those with limited computer resources interested in performing occasional simple searches for data, to the professional Earth science researcher in need of executing complex data queries on a regular basis.

The Web interface is available at the following URL: http://harp.gsfc.nasa.gov/~imswww/pub/imswelcome/. No password or special account is necessary. The welcome screen contains several options for composing a search. When the search results are returned, summary and detailed descriptions are provided with sample browse images for each data set. Data may be ordered on a variety of media and with different formatting options. Most of the data available through the EOS IMS are free of charge.

When submitting queries for ECS data, users will be able to specify ECS specific information, such as ECS datasets, instruments, and platforms, which are not a part of the V0 datasets. Additionally, ECS data archives will appear as separate unique data centers from the V0 data archives.

1616 McCormick Drive, Upper Marlboro, MD 20774 E-mail: scoot@eos.hitc.com

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